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01/26/06 6682-66959-02 451394 CGL02/0396WO01 A55-522.2

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Rogers et al.

Application No. 10/533,477
Filed: April 29, 2005

Filed: April 29, 2005 Confirmation No. 4053

For: MULTIPLE COMPONENT FOOD

PRODUCT USEFUL FOR DELIVERING GLUCOSAMINE AND/OR N-ACETYL-D-

GLUCOSAMINE Examiner: Not yet assigned

Art Unit: 1617

Attorney Reference No. 6682-66959-02

CERTIFICATE OF MAILING

1 hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Posts I service as First Class Mail in an envelope addressed to: COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450 on the date shown below.

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Date Mailed January 27, 206

INFORMATION DISCLOSURE STATEMENT PURSUANT TO 37 C.F.R. § 1.97(b)(3)

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Listed on the accompanying form PTO-1449 and enclosed herewith are several Englishlanguage and/or non-English-language documents. Applicants respectfully request that these documents be listed as references cited on the issued patent.

Copies of United States patents and United States published patent applications do not have to be provided to the Patent Office (37 C.F.R. 1.98(a)(2)(ii)). Copies of unpublished U.S. applications do not have to be provided, as long as the application is available on PAIR, as this requirement of 37 C.F.R. § 1.98(a)(2)(iii) has been waived by the United States Patent and Trademark Office pursuant to the Official Gazette Notice on October 19, 2004 (1287 OG 163). Applicants will provide copies of such patents or applications upon request.

Applicants filed this Information Disclosure Statement ("iDS") before the mailing date of a first Office action on the merits. As a result, no fee should be required to file this iDS. However, if the Patent Office determines that a fee is required for Applicants to file this iDS, please charge any such fees, or credit overpayment, to Deposit Account No. 02-4550. A duplicate copy of this Information Disclosure Statement is enclosed.

The filing of this IDS shall not be construed to be an admission that the information cited in the statement is, or is considered to be, prior art or otherwise material to patentability as defined in 37 C.F.R. §1.56.

Respectfully submitted,

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

| Attorney Docket Number | 6682-66959-02 |
|------------------------|------------------|
| Application Number | 10/533,477 |
| Filing Date | April 29, 2005 |
| First Named Inventor | Rogers |
| Art Unit | 1617 |
| Examiner Name | Not yet assigned |

U.S. PATENT DOCUMENTS

Copies of U.S. Patent documents do not need to be provided, unless requested by the Patent and Trademark Office. For patents, provide the patent number and the issue date. For published U.S. applications, provide the publication number and the publication date. For unpublished pending patent applications, provide the application number and the fling date.

| xaminer's Initials* | Cite No. (optional) | Number | Publication Date | Name of Applicant or Patentee |
|------------------------|------------------------|-----------|------------------|-------------------------------|
| /PEZ/ | | 2,040,879 | 05/19/1936 | Rigby |
| 1 | | 3,232,836 | 02/01/1966 | Carlozzi et al. |
| | | 3,632,754 | 01/04/1972 | Balassa |
| | | 3,683,076 | 8/1972 | Rovati |
| | | 3,903,268 | 09/02/1975 | Balassa |
| + | | 3,911,116 | 10/07/1975 | Balassa |
| | | 3,914,413 | 10/21/1975 | Balassa |
| | | 4,056,432 | 11/01/1977 | Slagel et al. |
| | | 4,282,351 | 08/04/1981 | Muzzarelli |
| | | 4,642,340 | 02/10/1987 | Senin et al. |
| | | 4,806,474 | 02/21/1989 | Hershberger |
| | | 4,886,541 | 12/12/1989 | Hadwiger |
| | | 4,948,881 | 08/14/1990 | Naggi et al. |
| | | 4,970,150 | 11/13/1990 | Yaku et al. |
| | | 4,983,304 | 01/08/1991 | Tsugita et al. |
| | | 5,219,749 | 06/15/1993 | Bouriotis et al. |
| 1/ | | 5,232,842 | 08/03/1993 | Park et al. |

EXAMINER SIGNATURE:

/Paul Zarek/

DATE CONSIDERED: 11/10/2008

^{*} Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

| aminer's C | ite No. | | T | Name of |
|--------------|-----------------|--------------|---------------------------|----------------------|
| * | F | OREIGN PATEN | T DOCUMENTS | |
| $\sqrt{}$ | 6,333,399 | 12/25/200 | 1 Teslenko | et al. |
| | 6,248,570 | 06/19/200 | 1 Michon e | t al. |
| | 6,117,851 | 09/12/200 | 0 Sherman | et al. |
| | 5,998,173 | 12/07/199 | 9 Haynes et | al. |
| | 5,985,644 | 11/16/199 | 9 Roseman | et al. |
| | 5,905,035 | 05/18/199 | | |
| | 5,902,801 | 05/11/199 | | |
| | 5,859,263 | 01/12/1999 | | |
| | | | | |
| | 5,843,923 | 12/01/199 | | |
| | 5,730,876 | 03/24/199 | | |
| + | 5,702,939 | 12/30/199 | 7 Fujishima | ı et al. |
| | 5,520,933 | 05/28/199 | 6 Yoshida e | et al. |
| PEZ/ | 5,262,310 | 11/16/199 | | |
| | | | Art Unit Examiner Name | Not yet assigned |
| BY APPLICANT | | | First Named Invento | |
| INFORMA | TION DISCLOSURE | STATEMENT | Filing Date | April 29, 2005 |
| | | | Application Number | |
| | | | Attorney Docket Nu | mber 6682-66959-02 |

| POREIGN FATENT DOCUMENTS | | | | | |
|--------------------------|------------------------|---------------|--------------|---------------------|----------------------------------|
| Examiner's Initials* | Cite No. (optional) | Country | Number | Publication Date | Name of Applicant or Patentee |
| /PEZ/ | | EP | 0 566 349 | 10/1993 | Mitsubishi Petrochemical Co. |
| | | EP | 0 768 320 | 4/1997 | Nippon Oil Co. Ltd. |
| | | EP | 0 885 954 A1 | 12/23/1998 | Nestle SA |
| | | EP | 0 997 480 | 5/2000 | Maruzen Petrochem Co. Ltd. |
| $\overline{\mathbf{V}}$ | | Great Britain | 458,839 | 12/21/1936 | Du Pont |
| EXAMINEI SIGNATUR | | /Paul Zarek/ | | DATE CONSIDERED: | 11/10/2008 |

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

SLR:dm 01/26/06 6682-66959-02 451396 CGL02/0396WO01 A55-522.2 Attorney Docket Number 6682-66959-02 10/533,477 Application Number Filing Date April 29, 2005 INFORMATION DISCLOSURE STATEMENT BY APPLICANT First Named Inventor Rogers 1617 Art Unit Examiner Name Not yet assigned Great Britain 785,525 10/30/1957 American Home Prod /PF7/ Great Britain 833.264 04/21/1960 Ciba Ltd. Great Britain 896,940 05/23/1962 Pfizer & Co C 53-020443 A--We 02/24/1978 Japan Asama Kasei KK do not have an English abstract for this Japan 55012109 01/28/1980 Kogyo Gijutsuin (Abstract) Japan 62070401 A2 03/31/1987 Fuji Spinning Co. Ltd. (Abstract) Japan 63097633 A2 09/20/1988 Fuii Spinning Co. Ltd. (Abstract) Japan 63225602 A2 09/20/1988 Nitta Gelatin KK (Abstract) 2149335 A2 06/07/1990 Nippon Oils & Fats Co. Ltd. Japan (Abstract) 2180903 A2 07/13/1990 Nippon Oils & Fats Co. Ltd. Japan (Abstract) 2200196 A2 Japan 08/08/1990 Nippon Kayaku KK (Abstract) Japan 2229832 A2 09/12/1990 Fuji Spinning Co. Ltd. (Abstract) Taiyo Kagaku Kogyo Co. Ltd. 2258740 A2 12/19/1995 Japan (Abstract) 5068580 A2 10/23/1993 Pias Arise KK Japan (Abstract) 7330808 A2 Japan 12/19/1995 Dainichiseika Color Chem.

| EXAMINER SIGNATURE: | /Paul Zarek/ | DATE CONSIDERED: | 11/10/2008 |
|---------------------------|---------------------------------------|---------------------------|-------------------------------|
| * Examiner: Initial if re | ference considered, whether or not in | conformance with MPEP 609 | Draw line through cite if not |

02/13/1996

11/19/1998

(Abstract)

8-41106 A

(Abstract)

(Translation)

10297913 A2

Japan

Japan

Kawaken Fine Chemicals Co.

^{*} Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

| SLR:dm 01/26 | /06 6682-6 | 6959-02 451396 C | GL02/0396WO01 A55-522.2 | | | |
|-------------------------|------------------------|------------------------------------------------------------------------------------------------------|---------------------------------------------------|----------------------------------------------|-----------|----------------------------|
| | | | | | | 6682-66959-02 |
| | | | | Application Number | er | 10/533,477 |
| INFOR | MATION | DISCLOSUE | RE STATEMENT | Filing Date | | April 29, 2005 |
| | В | Y APPLICAN | T | First Named Inventor | | Rogers |
| | | | | Art Unit | | 1617 |
| | | | | | | Not yet assigned |
| /PEZ/ | | Japan - | 2001-000158 A | 01/09/2001 | Sunto | ry Ltd. |
| | | WIPO | WO 98/30713 | 7/1998 | Bio-T | echnical Resources |
| | | WIPO | WO 98/42755 | 10/01/1998 | Unive | ersity of Strathclyde |
| | | WIPO | WO 99/41294 | 8/1999 | Exxo | n Chemical Patents Inc. |
| V | | WIPO | WO 00/04182 | 01/27/2000 DCV Resor | | Inc. d/b/a Bio-Technical |
| Examiner's Initials* | Cite No. (optional) | JT 6572 | го | THER DOCUMENT | s | |
| /PEZ/ | | Aldrich, Catal | talog Hand book of Fine Chemicals, p. 756 (1996). | | | |
| 1 | | | | Degree of Acetylation | | itin and Chitosan by |
| | | Thermal Anal | ysis," J. Thermal And | lysis 28:189-193 (198 | 33). | |
| | | Arcidiacono e | t al., "Molecular Wei | ght Distribution of Cl | nitosan I | solated from Mucor |
| | | 286 (1992). | | _ | | echnol. Bioeng. 39:281- |
| | | | | yean Structure from V | | |
| | | subtilis 168 at (1999). | nd Role of PBP 5 in P | eptidoglycan Maturat | ion," J. | Bacteriol. 181:3956-3966 |
| | | Bartnicki-Gar | | istry, Morphogenesis | , and Ta | xonomy of Fungi," |
| | | | l Cell Wall, pp. 87-10 | | | |
| | | | | eacetylation of Chitir Shell," ASEAN Food | | |
| | | | | | | lusion Chromatography |
| | | | | attering Technique," | | |
| | | | | Cleavage of Glycosidi | c Linka | ges," Chapter 3, pp. 29-41 |
| | | | | aking a "Substantial | | |
| | | | | chloride under Regula | | |
| | | | trament and the Coungredients," February | cil of 27 January 1997 | / concer | ning novel foods and |
| 1/ | - | | | | ENASI | IRETM Glucosamine |
| V | | Cargill, Incorporated, "GRAS NOTIFICATION for REGENASURE™ Glucosamine Hydrochloride," April 6, 2004. | | | | |

| EXAMINER SIGNATURE: | /Paul Zarek/ | DATE CONSIDERED: | 11/10/2008 | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------------|------------|--|
| Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant. | | | | |

| SLR:dm 01/26/06 | 6682-66959-02 451396 CGL02/0396WO01 A55-522.2 | Attorney Docket Number | 6682-66959-02 |
|-----------------|---------------------------------------------------------------------------|------------------------------|---------------------------|
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| | BY APPLICANT | First Named Inventor | Rogers |
| | | Art Unit | 1617 |
| | | Examiner Name | Not yet assigned |
| /PEZ/ | Carlson et al., "Chitin/Chitosan Ext Research, 16 pages (August 1997). | raction from A. Niger Myceli | ium," Cargill Central |
| 1 | "Chitin/Chitosan Specifications," B | | |
| | http://www.biopolymer.com/spec.h | | |
| | Copy of glucosamine product label warning). | from Twinlab Flexi-licious (| with shellfish allergy |
| | Copy of glucosamine product label warning). | from HyVee HealthMarket (| with shellfish allergy |
| | Copy of glucosamine product label warning). | from Osteo Bi-flex (2 pages) | (with shellfish allergy |
| | Database Caplus on STN: Accession | on No. 1976-519336 (1976). | |
| 11 | Database Caplus on STN: Accession | on No. 1999:816485 (1999). | |
| | Davies et al., "Determination of the Methods in Enzymology 161:442-44 | | itin and Chitosan," |
| | Deal et al., "Nutraceuticals as Thera | | tis. The Role of |
| | Glucosamine, Chondroitin Sulfate, and 25:379-395 (1999). | | |
| | Department of Health and Human S and Crayfish, FDA News (2002) (a) | | pling of Imported Shrimp |
| | www.fda.gov.bbs.topics/NEWS/200 | 02/NEW00815.html, last visi | ted October 18, 2002). |
| | Domanski et al., "Use of a Chitinas | | |
| | Production from Candida albicans, | | |
| | Domszy et al., "Evaluation of Infra | | s for Analysing |
| | Chitosan," Makromal. Chem. 186:1 Eichner, "Antioxidative Effect of M | | an" Duna Ed Mutu Sai |
| | 5:441-451 (1981). | iamaru Keachon intermedian | os, Frog. Pa. Nuir. Sci. |
| | Farkas, "Fungal Cell Walls: Their S Acta Biotechnol. 10:225-238 (1990) | | iotechnological Aspects," |

| EXAMINER SIGNATURE: | /Paul Zarek/ | DATE 11/10/2008 CONSIDERED: |
|------------------------|----------------------------|-------------------------------------------------------------------------|
| * Examiner: Initial i | f reference considered, wh | ther or not in conformance with MPEP 609. Draw line through cite if not |

Physiol. 13B:416-440 (1981).

Federal Trade Commission, Shark Cartilage Receives 10M Draft Monograph, FTC Notice (2002) (available at www.fic.gov/opa/2002/09/fdacomments.htm, as of September 2002).

Ferrer, "Acid Hydrolysis of Shrimp-Shell Wastes and the Production of Single Cell Protein from the Hydrolysate," Bioresource Technol. 57:55-60 (1996).

Fleet et al., "17 Fungal Glucans - Structure and Metabolism," Encyclopedia of Plant

in conformance and not considered. Include copy of this form with next communication to applicant.

SLR:dm 01/26/06 6682-66959-02 451396 CGL02/0396WO01 A55-522.2 Attorney Docket Number 6682-66959-02 Application Number 10/533.477 INFORMATION DISCLOSURE STATEMENT Filing Date April 29, 2005 BY APPLICANT First Named Inventor Rogers Art Unit 1617 Examiner Name Not yet assigned "The Fungal Cell," Chapter 2, pp. 23-39 (Date Unknown). /PF7/ Gassner et al., "Teichuronic Acid Reducing Terminal N-Acetylglucosamine Residue Linked by Phosphodiester to Peptidoglycan of Micrococcus luteus," J. Bacteriol. 172:2273-2279 (1990). Ghorpade et al., "Industrial Applications for Levulinic Acid," Industrial Agricultural Product Center, University of Nebraska (visited Oct. 8, 2003) http://agproducts.unl.edu/levu.htm 8 pp. "Glucosamine Hydrochloride," Pharmacopeial Forum 26:1449-1450 (2000). Gobin et al., "Structural Chemistry of Fungal Polysaccharides," pp. 367-417 (1968). Gomyo et al., "On the Interaction of Melanoidin with Metallic Ions," Agr. Biol. Chem. 40:33-40 (1976). Hayase et al., "Scavenging of Active Oxygens by Melanoidins." Agric. Biol. Chem. 53:3383-3385 (1989). Huang et al., "Development and Validation of Oxygen Radical Absorbance Capacity Assay for Lipophilic Antioxidants Using Randomly Methylated β-Cyclodextrin as the Solubility Enhancer," J. Agric. Food Chem., 7 pp. (2002). Huang et al., "High-Throughput Assay of Oxygen Radical Absorbance Capacity (ORAC) Using a Multichannel Liquid Handling System Coupled with a Microplate Fluorescence Reader in 96-Well Format," J. Agric. Food Chem. 50:4437-4444 (2002). Jacobson, "Berichte der Deutschen Chemischen Gesellschaft," pp. 2192-2200 (1898) (German). Jeremy Appleton, Inadequate Screening of Imported Food and Dietary Supplements, 2 Integrative Medicine, 58-65 (available at www.ifr.bbsrc.ac.uk/protall/infosheet.htm, Feb./Mar. 2003). Johnston et al., "The Composition of the Cell Wall of Aspergillus niger." Biochem, J. 96:651-658 (1965). Kimura et al., "Determination of the Mode of Hydrolysis of Chitooligosaccharides by Chitosanase Derived from Aspergillus Oryzae by Thin Layer Chromatography," Chemistry Letters, pp. 223-226 (1992). Kostina et al., "Chitin of mycelial fungi of the Penicillium genus," Prikl. Biokhim. Mikrobiol. Abstract (1978), 14(4), 586-593. Kurita, "Controlled Functionalization of the Polysaccharide Chitin," Prog. Polym. Sci.

| | EXAMINER SIGNATURE: | /Paul Zarek/ | DATE CONSIDERED: | 11/10/2008 |
|---|---------------------------|---------------------------------------|---------------------------|-------------------------------|
| I | * Examiner: Initial if re | ference considered, whether or not in | conformance with MPEP 600 | Draw line through site if not |

26:1921-1971 (2001).

^{*} Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

SLR:dm 01/26/06 6682-66959-02 451396 CGL02/0396WO01 A55-522.2 Attorney Docket Number 6682-66959-02 Application Number 10/533,477 Filing Date April 29, 2005 INFORMATION DISCLOSURE STATEMENT BY APPLICANT First Named Inventor Rogers 1617 Art Unit Examiner Name Not yet assigned Kurita et al., "Studies on Chitin, 3, Preparation of Pure Chitin, Poly(N-acetyl-D-/PEZ/ glucosamine), from the Water-Soluble Chitin," Makromal. Chem. 178:2595-2602 (1977). Kurita et al., "Studies on Chitin, 4, Evidence for Formation of Block and Random Copolymers of N-Acetyl-D-Glucosamine and D-Glucosamine by Hetero- and Homogeneous Hydrolyses," Makromol. Chem. 178:3197-3202 (1977). Maghami et al., "Evaluation of the Viscometric Constants for Chitosan," Makromol. Chem. 189:195-200 (1988). Maitre et al., "Primary T-Cell and Activated Macrophage Response Associated with Tumor Protection Using Peptide-Poly-N-Acetyl Glucosamine Vaccination," Clin. Cancer Res. 5:1173-1182 (1999). Mima et al., "Highly Deacetylated Chitosan and Its Properties," J. Appl. Polymer Sci. 28:1909-1917 (1983). Muzzarelli et al., "Chelating, Film-Forming, and Coagulating Ability of the Chitosan-Glucan Complex from Aspergillus niger Industrial Wastes," Biotechol. Bioeng, XXII:885-896 (1980). Nanjo et al., "Purification, Properties, and Transglycosylation Reaction of β -N-Acetylhexosaminidase from Nocardia orientalis," Agricult. Biol. Chem. 54:899-906 (1990).Nanio et al., "Purification and Characterization of an Exo- β -D-Glucosaminidase, a Novel Type of Enzyme, from Nocardia orientalis," J. Biol. Chem. 265:10088-10094 (1990). Nanio et al., "Enzymatic Method for Determination of the Degree of Deacetylation of Chitosan," Anal. Biochem. 193:164-167 (1991). Nguyen et al., "Composition of the Cell Walls of Several Yeast Species," Abstract 50:206-212 (1998). Nikolaeva et al., CAPLUS Abstract, AN 1968:62461 (1968). Nikolaeva et al., "Preparation of glucosamine from shrimp shells, and its use in medicine." Tr. Vses. Nauchno Issled. Inst. Morsk. Rybn. Khoz Okeanogr., pp. 165-169 (1967) (Abstract). Nilsson et al., "Chitin as an indicator of the biomass of two wood-decay fungi in relation to temperature, incubation time, and media composition," Abstract, Canadian Journal of Microbiology, (1998), Vol. 44, No. 6, 575-581. Niola et al., "A Rapid Method for the Determination of the Degree of N-Acetylation of Chitin-Chitosan Samples by Acid Hydrolysis and HPLC," Carbohydr. Res. 238:1-9 (1993)

| V | No et al., "Preparation Food Prod. Technol. 4 | | and Chitosan - A Review," J. A. | quat. |
|----------|--------------------------------------------------|------|---------------------------------|-------|
| EXAMINER | /Paul Zarek/ | DATE | 11/10/2008 | |

SIGNATURE:

CONSIDERED:

^{*} Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant,

| SLR:dm | 01/26/06 6682-6 | 6959-02 451396 CGL02/0396WO01 A55-522.2 | | | |
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| | | | Attorney Docket Number | 6682-66959-02 | |
| | | | Application Number | 10/533,477 | |
| IN | FORMATION | N DISCLOSURE STATEMENT | Filing Date | April 29, 2005 | |
| | В | BY APPLICANT | First Named Inventor | Rogers | |
| | | | Art Unit | 1617 | |
| | | | Examiner Name | Not yet assigned | |
| /PEZ | Z/ | Nogawa et al., "Purification and Cha Cellulolytic Fungas Trichoderma red | | | |
| | | (1998). | | | |
| | | Novikov et al., "Synthesis of D(+)-C 70:1467-1470 (1997). | · · · · · · · · · · · · · · · · · · · | •• | |
| | | Novikov, "Kinetics of formation of I Russian Journal Abstract (Sankt-Pet | | | |
| | | Ottoy et al., "Preparative and Analyt Carbohydr. Polymers 31:253-261 (1 | | ography of Chitosans," | |
| | | Ou et al., "Analysis of Antioxidant A | Activities of Common Vegeta | | |
| | | | AC) and Ferric Reducing Antioxidant Power (FRAP) | | |
| | | Assays: A Comparative Study," J. A | | | |
| | | Pelletier et al., "Chitin/Chitosan Tra | | | |
| | | Treatment Including Characterizatio Bioeng. 36:310-315 (1990). | | | |
| - 1 | | | elial growth of basidiomycetes by means of chitin emistry (Oxford) (1982), Vol. 21, No. 2, 345-349. | | |
| - | | Rege et al., "Chitosan Processing: I | | | |
| | | Alkaline Hydrolysis and Effect of th Properties," <i>Carbohydr. Res.</i> 321:23 | e Processing Sequence on th | | |
| | | Roberts et al., "Determination of the 4:374-377 (1982). | | nitosan," Int. J. Biol. | |
| | | Rokem et al., "Degradation of Funga | al Cell Walls Taking into Co | nsideration the | |
| | | Polysaccharide Composition," Enzym | | | |
| | | Ruiz-Herrera, "Chemical Componer Biochem. Biophys. 122:118-125 (196 | | rillus Species," Arch. | |
| | | Sabnis et al., "Improved Infrared Sp | | nalysis of Degree of N- | |
| | | Deacetylation of Chitosan," Polymen | | marysis of Degree of 11- | |
| | | Sakai et al., "Purification and Hydro | | from Nocardia | |
| - | | orientalis," Biochimica et Biophysic | | | |
| *************************************** | | Sannan et al., "Studies on Chitin, 2, Chem. 177:3589-3600 (1976). | Effect of Deacetylation on S | olubility," Makromol. | |
| | | Shahidi et al., "Food Applications of 10:37-51 (1999). | f Chitin and Chitosans," Tren | ds Food Sci. Technol. | |
| | | Shu "Degradation Products Formed | from Glucocomine in Water | " I Agricult Food | |

| EXAMINER SIGNATURE: | /Paul Zarek/ | DATE CONSIDERED: | 11/10/2008 | | | |
|-------------------------------------------------------------------------------------------------------------------------|--------------|---------------------|------------|--|--|--|
| * Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not | | | | | | |

Chem. 46:1129-1131 (1998).

in conformance and not considered. Include copy of this form with next communication to applicant.

| SLR:dm 01/26/06 | 6682-66959-02 451396 CGL02/0396WO01 A55-522.2 | | | |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--------------------|--|
| 3LK.0III 01/20/06 | 0062-00737-02 431390 CGE02/0390WO01 A33-322.2 | Attorney Docket Number | 6682-66959-02 | |
| INFORMATION DISCLOSURE STATEMENT | | Application Number | 10/533,477 | |
| | | Filing Date | April 29, 2005 | |
| | BY APPLICANT | First Named Inventor | Rogers | |
| | | Art Unit | 1617 | |
| | | Examiner Name | Not yet assigned | |
| /PEZ/ | Sigma, Biochemicals and Reagents, | p. 461 (2000). | | |
| | Stagg et al., "The Characterization of Aspergillus Niger," 320:64-72 (1 | 973). | | |
| | Stainer et al., "The Microbial World | 1," Prentice-Hall, Inc., pp. 33 | 2-336 (1970). | |
| | Tan et al., "The Degree of Deacetylation of Chitosan: Advocating the First Derivative UV-Spectrophotometry Method of Determination," <i>Talanta</i> 45:713-719 (1998). | | | |
| | Wessels et al., "15 Fungal Cell Wal Carbohydrates, pp. 352-394 (1981) | | , | |
| | Wu et al., "Determination of Molec Performance Liquid Chromatograph | | | |
| | Xianchang Gong, Heavy Metal Con regarding a crab shell glucosamine | | e Product (a paper | |
| | Yang et al., "Acidic hydrolysis and Journal Abstract, Chinese Agricultu | | | |
| | Yen et al., "Antioxidant and Prooxi Products," The Maillard Reaction in 236 (1998). | | | |
| | Yen et al., "Antioxidative Activity a Lysine Maillard Reaction Products, | | | |
| V | | | | |
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| | EXAMINER SIGNATURE: | /Paul Zarek/ | DATE CONSIDERED: | 11/10/2008 |
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Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not
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